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In the claims:

1. (Currently Amended) A method for implementing a pre-designed state model, said method comprising:

extracting state information from the state model;

processing said extracted state information;

generating a state code and a state table in response to said processed extracted state information;

compiling said state code to generate a runtime code; and then

implementing the state model by running said runtime code while ~~referring to~~ utilizing information within said state table using a separate controller.

2. (Original) A method as in claim 1 wherein extracting state information from the state model comprises determining what events exist in the state model.

3. (Original) A method as in claim 1 wherein extracting state information from the state model comprises determining what transitions exist between states within the state model.

4. (Original) A method as in claim 1 further comprising:

generating an events symbols header in response to a header file; and

generating said state code in response to said processed extracted state information and said events symbols header.

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5. (Original) A method as in claim 4 wherein compiling said state code comprises compiling said state code in response to said events symbols header.

6. (Original) A method as in claim 1 further comprising:
generating a events symbols header in response to an events configuration file; and

generating said state code in response to said processed extracted state information and said events symbols header.

7. (Currently Amended) A method as in claim 1 further comprising annotating the state model ~~with actions and conditions~~ using a script language to alter state behavior.

8. (Currently Amended) A method for implementing a pre-designed plurality of state models for a state machine having an event configuration file, said method comprising:

extracting state information from the plurality of state models;

generating an events symbols header having global and shared event symbol definitions from the event configuration file;

processing said extracted state information in response to said events symbols header;

generating a plurality of state codes and a plurality of state tables in response to said processed extracted state information;

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compiling said plurality of state codes using said events symbols header to generate a plurality of runtime codes; and

→ implementing the state models by running said plurality of runtime codes while (referring to) said plurality of state tables.

9. (Original) A method as in claim 8 wherein implementing a pre-designed plurality of state models comprises implementing a cooperating set of run-time controllers.

10. (Currently Amended) A method as in claim 8 further comprising:

generating [[an]] said events symbols header in response to a header file; and

generating said plurality of state codes in response to said processed extracted state information and said events symbols header.

11. (Currently Amended) A state processor for generating a state table and a runtime code for use in implementing [[of]] one or more pre-designed state models, said device comprising:

a state model information provider extracting state model information in response to the one or more state models;

a state information separator generating a state code and the state table in response to the one or more state models; and

a compiler compiling said state code and generating the runtime code.

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12. (Original) A device as in claim 11 further comprising:

an event organizer generating an event symbols header in response to a header file; and

said compiler compiling said state code using said event symbols header.

13. (Original) A device as in claim 12 wherein said event organizer generates an event symbols header comprising a centralized list of all events for adding or renaming events.

14. (Original) A device as in claim 12 wherein said event symbols header comprises global and shared event symbol definitions.

15. (Original) A device as in claim 12 wherein said header file comprises global and shared event symbol definitions.

16. (Currently Amended) A device as in claim 11 further comprising a runtime library comprising:

at least one event processor; and

an interpreter.

17. (Original) A device as in claim 16 wherein said runtime library comprises a generic state machine component for implementing of event handling.

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18. (Currently Amended) A device as in claim 16 wherein said ~~runtime library comprises~~ interpreter is a time and memory efficient interpreter for processing and handling events.

91 19. (Currently Amended) A device as in claim 16 wherein said ~~runtime library~~ at least one event processor comprises a scripted dynamic events processor for annotating the one or more state models to alter state behavior.

20. (Currently Amended) A device as in claim 11 wherein said state processor generates a plurality of state tables and a plurality of state codes in response to the one or more state models.
